

SPECIFICATION

Product Name: Mono Sodium Phosphate Monohydrate USP Grade
Chemical Formula: $\text{NaH}_2\text{PO}_4 \cdot \text{H}_2\text{O}$
CAS Number: 10049-21-5
Molecular Weight: 137.99 g/mol
Appearance: White crystalline powder
Odor: Odorless.

Chemical Composition

Parameter	Unit	Typical Value	Specification (Min/Max)
Identification			
A. Reaction	-	Complies	A. It gives reaction of phosphates.
B. Reaction	-	Complies	B. It gives reaction of sodium salt.
pH (5%w/v solution)	%	4.28%	4.10 – 4.50
Insoluble Substances	%	Complies	NMT 0.2%
Chloride	PPM	Complies	NMT 140 PPM
Sulphate	PPM	Complies	NMT 1500 PPM
Aluminium, calcium and related elements.	-	Complies	Not became turbid when rendered slightly alkaline to litmus paper with 6 M ammonium hydroxide.
Arsenic	PPM	Complies	NMT 8 PPM
Water by KF	%	14.37%	10.0% - 15.0%
Assay	%	100.01%	98.0% - 103.0 % of NaH_2PO_4
Sieve #40	%	Complies	NMT 10%
Sieve #100	%	Complies	NMT 10%
Sieve #230	%	Complies	NMT 50%
Microbiological Test			

Aerobic plate count	Cfu/gm	Complies	1,000 Cfu/gm
Yeast and Molds	Cfu/gm	Complies	100 Cfu/gm

Physical Properties

- Solubility: Freely soluble in water. Practically insoluble in ethanol. Insoluble in acetone. Insoluble in ether.

Shelf Life & Storage

- Shelf Life: 5 years from date of manufacture under recommended storage.
- Storage Conditions: Store in a tightly closed container in a cool, dry, and well-ventilated place, protected from moisture, humidity, and direct sunlight. Keep the container tightly sealed when not in use to prevent moisture absorption and caking.

Applications

- Use: Widely used as a buffering agent, pH adjuster, electrolyte source, and pharmaceutical excipient in pharmaceutical, nutraceutical, food, and laboratory applications.
- Dosage: Depends on the intended application, formulation, and regulatory requirements.

Packaging

- Standard Packing: 50 kg woven PP bags with inner liner and 100 Grams or as per customer requirement.

- Labeling: Product name, batch number, net weight, manufacture date, expiry date, and manufacturer details.

* Specifications are based on the manufacturer's provided specifications.